



**State of New Jersey**  
**Department of Environmental Protection and Energy**  
Division of Responsible Party Site Remediation  
CN 028  
Trenton, NJ 08625-0028

Scott A. Weiner  
Commissioner

Karl J. Delaney  
Director

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**  
**NO. P 642 609 095**

Cristopher Anderson  
Director of Environmental Affairs  
L. E. Carpenter & Company  
1301 East Ninth Street  
Suite 3600  
Cleveland, OH 44144

**FEB 9 1993**

Re: L. E. Carpenter Site  
Wharton Borough, Morris County  
Response to Comments dated January 15, 1993

Dear Mr. Anderson:

The New Jersey Department of Environmental Protection and Energy (Department) has reviewed the comments submitted by Roy F. Weston (WESTON) regarding our December 15, 1992 discussion and the Departments comment letter dated December 21, 1992 relative to the Final Feasibility Study (FS).

The Department does not accept Weston's explanation and rational for ruling out reinjection of excess treated ground water back into the aquifer. My letter of December 21, 1992 requested a full explanation backed up by a technical basis for ruling out discharge of treated ground water. The January 15, 1992 letter from WESTON discusses the negative aspects ground water recharge, however, seems to focus more on the benefits of surface water discharge. The Department does not favor the discharge of treated ground water to the Rockaway River no matter how low the recharge rate will be. Additionally, the Department is not convinced that the river is the best mechanism for the discharge of treated ground water. The New Jersey Register dated February 1, 1993 has published the updated version of Surface Water Quality Criteria which proposes a classification of FW2-TM-(C1) for the Rockaway River between the Washington Forge Pond outlet downstream to the Rt. 46 bridge. This updated proposal may add another obstacle to the likelihood of being issued a surface water discharge permit.




The Department requests the following information and explanations to be submitted in two weeks upon receipt of this letter.

- I. The hydraulic conductivity of the shallow aquifer zone presented by WESTON is much less than the intermediate zone and is characterized as "QAL silt/clay unit". Based upon the results of the recent slug testing, this unit's average conductivity corresponds to a fine sand and, as such, its yield should be higher than indicated by WESTON. The discrepancy must be explained.
- II. Provide a map of the plume size and distribution, hydraulic parameters and the calculations used in obtaining the extraction rate of 10 gallons per minute.
- III. As mentioned previously, WESTON has failed to explain why the options for discharge of the excess effluent does not include recharge to ground water via injection wells. WESTON has failed to evaluate ground water reinjection in the FS and continues to ignore the discharge to ground water options. If the expected volume of treated groundwater is minimal, as suggested by Weston, then the Department considers injection wells, drain fields or infiltration galleries as appropriate options for handling the total volume of treated ground water.
- IV. WESTON's contention that discharge to the Rockaway River is necessary because the shallow aquifer's low permeability limits its ability to accept recharge is unsupported by known hydrogeologic conditions (see comments I). Using the results of the recent slug testing, an area of 7700 square feet (87 ft x 87 ft) is calculated to re-infiltrate the 10 gpm that WESTON proposes. This area is for surface re-infiltration. The required area would be less if a basin were utilized since standing heads would drive the water into the ground.

Attached please find additional comments on the Feasibility Study from USEPA. The Department finds that these comments do not change the findings of the Feasibility Study, but may add additional and helpful information.

The Department requires an acceptable response to our comments within two weeks of your receipt of this letter. Should you have any questions regarding this letter, please contact me at (609) 633-1455. Thank you for your continuing cooperation.

Sincerely,



Christina H. Purcell, Case Manager  
Bureau of Federal Case Management

L. E. Carpenter Site  
Page 3

cc: Martin O'Neill, WESTON  
John Prendergast, BEERA  
George Blyskun, BGWPA  
Jonathan Joseph, USEPA

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

DEC 23 1992

DATE:

SUBJECT: L.E. Carpenter Final Feasibility Study Report: Air Programs  
Branch and Air Compliance Branch Review

FROM: Peter Belmonte, Environmental Engineer  
Air Programs Branch, AWM

TO: Jonathan Josephs, Project Manager  
New Jersey Superfund Branch II, ERRD

Through: Rudolph Kapichak, Chief  
Technical Evaluation Section, AWM-AP

The Air Programs Branch and Air Compliance Branch have completed their review of the Final Feasibility Study for the L.E. Carpenter site located in Wharton, Morris County, New Jersey.

Site Background:

The L.E. Carpenter facility was designed and operated as a manufacturing facility for vinyl wall coverings from 1943 to 1987. The site occupies approximately 14.6 acres and is situated within a mixed commercial/industrial/residential area. The manufacturing process involved the generation of waste solvents including xylene and methyl ethyl ketone, the collection of solvent fumes via condensers, the collection of particulate matter via a dust collector, and discharge of non-contact cooling water to the Rockaway River. From 1963 to 1970 L.E. Carpenter disposed of its wastes, including polyvinyl chloride waste material, into an unlined on-site impoundment. This FS addresses soil contaminated with diethyl hexyl phthalate (DEHP), soil "hot spots" contaminated with lead, antimony, and PCBs, and groundwater contaminated with DEHP, xylenes, and ethylbenzene. The remedial alternatives that were recommended for this site are:

Alternative 3 - Closure

- Soil cover for DEHP contaminant soils;
- Spot excavation and disposal of surficial soils exceeding cleanup levels in isolated hot spot soils;
- Active immiscible product recovery;
- Aboveground aerobic biological treatment of shallow groundwater from recovery system;
- Additional treatment of groundwater by carbon adsorption as required to comply with discharge permits;
- Complete conversion to carbon adsorption when biological treatment becomes ineffective at low contaminant levels; and
- discharge treated groundwater to Rockaway River.

#### Alternative 4 - In-Situ Bioremediation with Reinfiltration

- All parts of Alternative 3;
- Consolidation of organic contaminated soils to within groundwater infiltration area;
- Excavation and off-site disposal of fill in waste disposal area and PCB contaminated soils located on Wharton Enterprises Property; and
- Reinfiltrate a portion of the contaminated groundwater with oxygen and nutrients to stimulate both desorption and biodegradation of organic contaminants adsorbed to soils and discharge to Rockaway River.

#### Comments:

- A list of potential ARARs is attached.
- The report states that dust control methods will be implemented to minimize particulate emissions for both alternatives. If Alternative 4 is the selected remedy, VOC emissions from groundwater treatment operations via a bioreactor and accumulation tank will be treated by vapor-phase carbon adsorption.

If you have any questions regarding this review, please contact me at extension 9893.

#### Attachment

cc: R. Basso, ERRD-NJSBII  
A. Devine, AWM-AP (w/o attachment)  
S. Leung, AWM-AC (w/o attachment)

## ATTACHMENT I

### General ARARs

#### 40 CFR 50 National Ambient Air Quality Standards

##### §50.6 Particulate Matter

- (a) 150  $\mu\text{g}/\text{m}^3$  for a 24 hour average concentration.
- (b) 50  $\mu\text{g}/\text{m}^3$  for an annual arithmetic mean.

##### §50.9 Ozone

- (a) Ambient concentrations are not to exceed 0.12 ppm (235  $\mu\text{g}/\text{m}^3$ ).

##### §50.12 Lead

- Ambient concentrations are not to exceed 1.5  $\mu\text{g}/\text{m}^3$  for a calendar quarter arithmetic mean.

#### NJAC 7:27-13

##### 13.3 Ambient air quality standards for suspended particulate matter

###### (a) Primary standards

- 1. During any 12-consecutive months, the geometric mean value of all 24-hour averages shall not exceed 75  $\mu\text{g}/\text{m}^3$ ; and
- 2. In any 12-consecutive months, 24-hour average concentrations may exceed 260  $\mu\text{g}/\text{m}^3$  no more than once.

##### 13.6 Ambient air quality standards for ozone

###### (a) Primary standard

- 1. During any 12-consecutive months, daily maximum one-hour concentrations may exceed 0.12 ppm (235  $\mu\text{g}/\text{m}^3$ ) no more than once.

##### 13.7 Ambient air quality standards for lead

###### (a) Primary and secondary standards

- 1. In any three consecutive months, the arithmetic mean of 24-hour averages shall not exceed 1.5  $\mu\text{g}/\text{m}^3$ .

#### NJAC 7:27-5

##### 5.1 Definitions

Air pollution means the presence in the outdoor atmosphere of one or more contaminants in such quantities or duration as are, or tend to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property throughout the State and in such territories of the State as shall be affected thereby and excludes all aspects of employer-employee relationship as to health and safety.

##### 5.2 General provisions

- (a) No person shall cause, suffer, allow or permit to be emitted into the outdoor atmosphere substances in quantities which shall result in air pollution.

### VOC ARARs

#### NJAC 7:27-16 Control and Prohibition of Air Pollution by Volatile Organic Substances

##### 16.6 Source operations other than storage tanks, transfers, open top tanks, surface cleaners, surface coaters, and graphic arts operations

- (a) No person shall cause, suffer, allow, or permit volatile organic substances (VOS) to be emitted into the outdoor atmosphere from any source operation in excess of the maximum allowable emission rate as determined in accordance with the procedure for using Table 4 (see the regulation for the procedure and for Tables 4 and 5).

**NJAC 7:27-17 Control and Prohibition of Air Pollution by Toxic Substances**

**17.3 Storage, transfer, an use of toxic volatile organic substances**

(b) In cases where the NJDEPE or EPA determines that the equipment or operating procedures as described in the Remedial Design do not represent advances in the art of control for the types and kind of TVOs emitted, the NJDEPE or EPA will so notify the affected persons.

**17.4 Discharge of Toxic Volatile Organic Substances**

(a) No person shall cause, suffer, allow or permit any TVOS to be emitted from any source operation into the outdoor atmosphere unless such discharge is:

1. No less than 40 feet above grade; and
2. No less than 20 feet higher than any area of human use or occupancy within 50 feet; and
3. Directed vertically upward at a discharge velocity of 3600 feet per minute or greater.

(b) No person shall cause, suffer, allow or permit the emission of a TVOS into the outdoor atmosphere from a system equipment, or control apparatus not approved by the NJDEP or EPA as being effective in preventing aerodynamic downwash.

**17.9 Exceptions**

(b) The provisions of this subchapter shall not apply to any TVOS which:

1. Was not added to or deliberately formed in a raw material or a finished product; and
2. Does not exceed 0.25 percent by weight of any raw material or finished product; and
3. Is not emitted from any source operation, storage tank, or transfer operation at a rate in excess of 0.1 pounds per hour.

**Excavation and Fugitive Dust ARARs**

**40 CFR 264 RCRA Standards**

**§264.251 Design and operating requirements.**

(f) If any hazardous waste pile contains particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

**§264.254 Monitoring and Inspection**

(a) During construction or installation cover systems must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(1) Synthetic covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(b) While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of:

(2) Proper functioning of wind dispersal control systems.

**Subpart N - Landfills**

**§264.301 Design and Operating Requirements**

(i) If the landfill contains any particulate matter which may be subject to wind disposal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

**To Be Considered:**

**Commonwealth of Puerto Rico Environmental Quality Board Regulation**

**Rule 404: Fugitive Dust**

A) No person shall cause or permit any materials to be handled, transported, or stored without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

1. The use of water or suitable chemicals for the control of dust in the demolition of existing buildings, construction operations, the grading of roads or the clearing of land;

2. The application of asphalt, water, or suitable chemicals on dirt roads or roads under construction, materials, stockpiles, and other surfaces which can give rise to airborne dust;
4. The covering, at all times when in motion, of open bodied trucks transporting materials likely to give rise to airborne dust;

B) No person shall cause or permit the discharge of visible emissions of fugitive dust beyond the boundary line of the property on which the emissions originate.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION II

DATE: JAN 06 1993

SUBJECT: Second Revision Draft Feasibility Study: L.E. Carpenter and Company Site, Borough of Wharton, Morris County, New Jersey.

FROM: *[Signature]*  
Dore Laposta, Chief  
Groundwater Management Section

TO: Raymond Basso, Chief  
New Jersey Superfund Branch II

As requested and in accordance with the Memorandum of Inter-divisional Coordination between the Emergency and Remedial Response Division (ERRD) and Water Management Division (WMD), WMD has reviewed the Second Revision Draft Revised Feasibility Study: L.E. Carpenter and Company Site, Borough of Wharton, Morris County, New Jersey, from the perspective of the Water Programs. We offer the following comments:

- Alternative 4 Treated Groundwater with Infiltration is more adequately described as "Soil Flushing, Groundwater Extraction and Treatment, and in-situ Bioremediation. Based on preliminary treatability study results, this alternative appears to hold the the greatest promise of meeting NCP criteria including permanence, use of alternative technologies, and compliance with ARARs.

However, further investigation into attenuated biodegradation of target compounds, and the effects of surfactants on biological activity, and surfactant transport and fate is warranted as an element of remedial design. Alternative detergents which are FDA approved direct food additives, such as sodium dodecyl sulfate; sodium dodecylbenzenesulfonate, and sorbitan mono-9-dodecanoate poly (20)(oxy-1,2-ethanediyl) may be effective and easily degraded. The potential for these and potentially other surfactants to mobilize site contaminants and to be readily degraded in the subsurface at the site should be investigated.

If you have any questions regarding these comments, please call Dennis McChesney of my staff at extension 5543.

cc: R. Hargrove, EIB  
J. Josephs, NJSB II/ERRD

o **Alternative 4, Compliance With ARARs**  
**Section 6.2.4.2.**

1. Same as comment 1 under Alternative 3.
2. Same as comment 2 under Alternative 3.
3. Same as comment 3 under Alternative 3.

o **Alternative 5, Compliance with ARARs**  
**Section 6.2.5.2.**

1. This section should discuss the type of mitigation being considered for wetland areas that may be excavated.
2. Same as comment 2 under Alternative 3.
3. Soil washing may impact areas sensitive for discovery of cultural resources. The NHPA is an ARAR for this remedy. As noted in comment 3 under Alternative 3, a Stage IB cultural resources survey is required for these sensitive areas.

o **Alternative 6, Compliance with ARARs**  
**Section 6.2.6.2.**

1. Same as comment 1 under Alternative 3.
2. Same as comment 2 under Alternative 3.
3. Same as comment 1 under Alternative 5.
4. Excavation of soil for incineration may impact areas sensitive for discovery of cultural resources. The NHPA is an ARAR for this remedy. As noted in comment 3 under Alternative 3, a Stage IB cultural resources survey is required for these sensitive areas.

Thank you for this opportunity to comment. If you have any questions concerning these comments or the information we have requested, please have Susan Osofsky contacted at x6677.

cc: R. Basso, 2ERRD-NJ  
J. Josephs, 2ERRD-NJ  
D. LaPosta, 2WM-DGP  
J. Cantilli, 2WM-WMP  
S. Stevens, 2ESD-SM

**JAN 06 1993**

Dayco/L.E. Carpenter Site  
Final Feasibility Study Report (November 1992)

John Filippelli, Chief  
Environmental Analysis Section

Pat Evangelista, Chief  
Northern New Jersey Superfund Section II

We have reviewed the Final Feasibility Study Report for the L.E. Carpenter site for issues related to environmental resources, and offer the following comments:

**o Wetlands Assessment and Floodplains Delineation Reports**

Our October 15, 1992 comment memo raised concerns about the wetland and floodplains reports for the site. The issue regarding the floodplains report and apparent inconsistencies in floodplain elevations was resolved during an October 15, 1992 telephone conversation between Susan Osofsky of my staff, and Christina Purcell, RPM for the New Jersey Department of Environmental Protection and Energy. However, our comments concerning the wetlands report have not yet been addressed. We look forward to resolution of the outstanding issues regarding sampling data, acreage estimates, mitigation measures, delineation timing, wetland dewatering, etc.

**o Alternative 3, Compliance with ARARs  
Section 6.2.3.2.**

1. Executive Order 11990 (Protection of Wetlands) and the EPA "Statement of Policy on Floodplains and Wetlands for CERCLA Action" require that remedial action alternatives be evaluated for how they may potentially impact wetland areas. Drawdown of the water table in the wetlands and siltation resulting from the trenching operations are potential impacts that must be considered if EPA is to comply with these TBCs.
2. This section should discuss the type of measures planned to minimize siltation and sediment loading.
3. Hot spot removal and trench installation may also impact areas sensitive for cultural resources, as discussed on page 2-19. Accordingly, the National Historic Preservation Act (NHPA) should be listed as an ARAR. A stage IB cultural resources survey will be required for areas sensitive for the discovery of cultural resources identified in the stage IA survey report.